

Listing of Claims

Please amend the claims as follows. The following list of claims will replace all prior versions and listings of claims in the application.

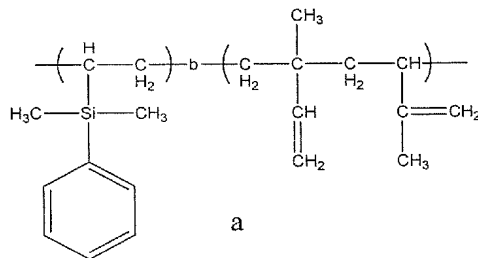
1-11. (Canceled)

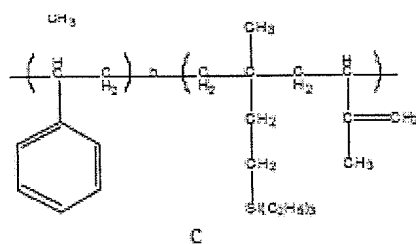
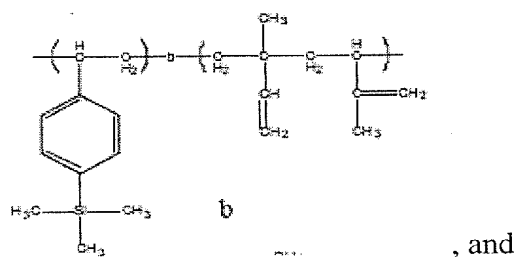
12. (Previously Presented) A resist composition, comprising a silicon-containing resist polymer, wherein the silicon-containing resist polymer comprises poly(dimethylphenylvinylsilane-b-isoprene) having a molecular weight between about 17,800 and about 22,100.

13. (Previously Presented) A resist composition, comprising a silicon-containing resist polymer, wherein the silicon-containing resist polymer comprises poly(trimethylsilylstyrene-b-isoprene) having a molecular weight between about 10,700 and about 28,700.

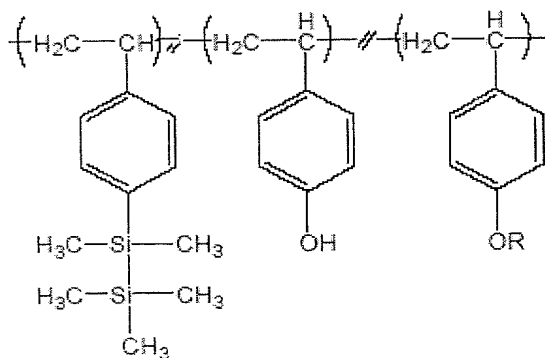
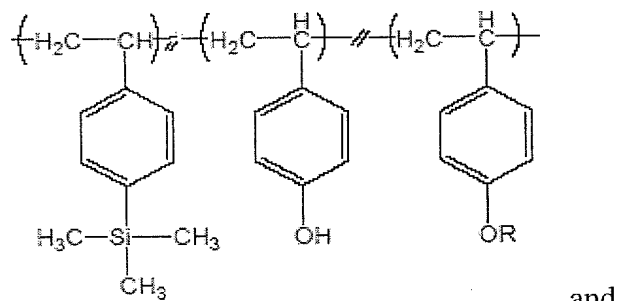
14-18. (Canceled)

19. (Previously Presented) A resist composition, comprising a silicon-containing resist polymer, wherein at least a portion of the silicon-containing resist polymer comprises a structure selected from the group consisting of:





20. (Previously Presented) A resist composition, comprising a silicon-containing resist polymer, wherein at least a portion of the silicon-containing resist polymer comprises a structure selected from the group consisting of



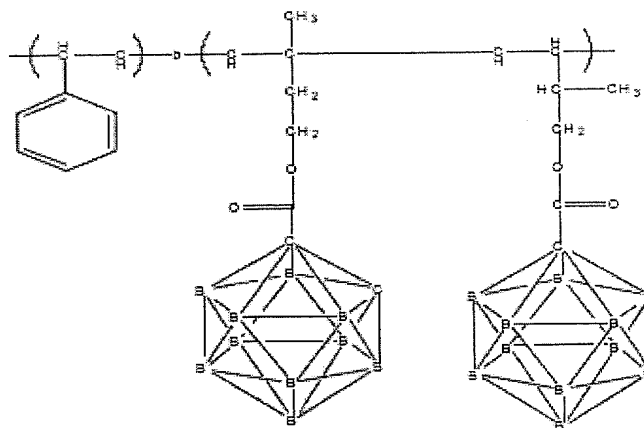
22-25. (Canceled)

wherein the boron-containing resist polymer comprises less than about 1 weight percent boron, and further comprises an element selected from the group consisting of carborane, carborane carboxylic acid, dimesitylborane and combinations thereof.

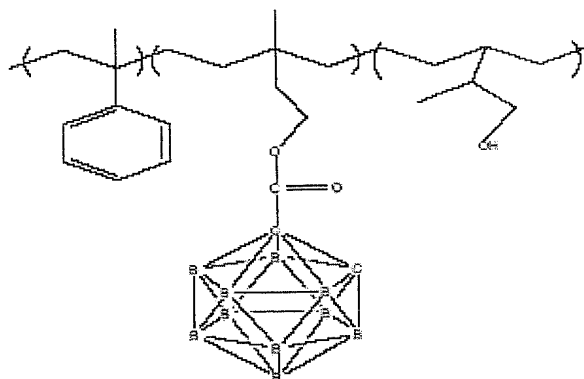
27-31. (Canceled)

The chemical structure shows a repeating unit of a poly(ether ether ketone) (PEEK) resin. The backbone consists of three repeating units: a phenylene group (represented by a benzene ring), an ether group (represented by an oxygen atom), and a ketone group (represented by a carbonyl group). The phenylene group is substituted with a pendant phenyl group. The ether and ketone groups are connected by a biphenyl core, which is a biphenyl ring system with a central carbon-carbon bond. The pendant phenyl group is attached to the biphenyl core via a methylene group.

34. (Previously Presented) A resist composition, comprising a boron-containing polymer, wherein the boron-containing polymer comprises a polymer having the structure:



35. (Previously Presented) A resist composition, comprising a boron-containing polymer, wherein the boron-containing polymer comprises a boron-containing polymer having the structure:



36-45. (Canceled)

46-47. (Canceled)

48. (Currently Amended) A method for forming a boron-containing resist polymer, comprising performing a hydroboration or esterification reaction of a boron-containing group with a polymer, wherein the polymer comprises a polymer selected from the group consisting of isoprene, styrene, vinyl compounds, poly(styrene-b-isoprene)[[.]] and hydroxylated

poly(styrene-b-isoprene), ~~poly(styrene-b-hydroxystyrene)~~, and ~~poly(α -methylstyrene-b-hydroxystyrene)~~, to introduce dimesitylborane or a carborane into the polymer.

49-51. (Canceled)

52. (Previously Presented) A method for increasing the reactive ion etch resistance of a polymer, comprising incorporating boron atoms into the polymer, wherein incorporating boron atoms into the polymer further comprises performing hydroboration of the polymer, wherein the hydroboration agent comprises dimesitylborane.

53-66. (Canceled)